Remarks

By the foregoing amendment, claim 1 has been cancelled and claim 6 has been rewritten in independent form. In addition, the claim 8 has been amended to recite a Markush group of metals. Reconsideration of the rejections of record is respectfully requested.

Claim 1 has been objected to on the basis "phenanthroline" is misspelled. Claim 1 has been cancelled.

Claims 1 and 6 have been rejected under 35 U.S.C. §102(b) as anticipated by U.S. Patent No. 5,834,053 to Dye et al. Claim 1 has been cancelled. In this regard it is respectfully submitted that, contrary to the Examiner's contention, there is no disclosure of the compound $Eu(II)(TMHD)_2$ in Dye et al. Further, the Examiner's attention is invited to page 4, second paragraph of the present application which states that it would have been expected that a Eu(II) complex would be unstable in air.

Claims 1, 8-9, 11-14, 16-21 and 23-27 have been rejected under 35 U.S.C. §103 as being unpatentable over U.S. Patent No. 5,923,363 to Hu et al. in view of U.S. Patent No. 6,025,677 to Moss, III. Claim 1 has been cancelled. More particularly, the Advisory Action states

> Moss, III teaches a cerium tetrakes-tetramethyl heptandionate compound that can be used in an EL device wherein the phosphor emits blue light. Although the reference discloses cerium IV, it would be expected that cerium III would behave in the same manner since it is the same element. The reference discloses cerium doped calcium thiogallate.

In this regard, it is respectfully submitted that Moss, III has been misconstrued as teaching an electroluminescent device comprising an electroluminescent compound as in the claimed invention, when in fact Moss, III merely teaches a cerium doped calcium thiogallate. This is a significant difference as discussed in more detail below.

Light is emitted from an electroluminescent device when an electron drops from its conduction band to a valence band. The wavelength of light emitted depends upon the gap between the conduction band and the valence band; *i.e.* the greater the gap the greater the energy difference and the lower the wavelength of emitted light.

When the electroluminescent material in an electroluminescent device is an alkaline rare earth thiogallate, the energy difference or gap between the conduction band and the valence band in the thiogallate anion results in the emission of light. As is well known to these skilled in the art the color of emitted light in electroluminescent emitters is dependent on the crystal field of the emitter. Dopants modify the crystal fields of the emitter and thus dopants can modify the wavelength of light which is emitted by the electroluminescent material.

Accordingly, one skilled in the art reading Moss, III understands that it is the thiogallate which emits light, not the dopant or activator, cerium. Thus, contrary to the Examiner's contention there is no teaching or suggestion in Moss, III et al. of an electroluminescent device including an electroluminescent compound including Ce (III) or Ce (IV) as recited in the claimed invention.

None of the cited references alone or in combination disclose or suggest an electroluminescent device including an electroluminescent compound as in the claimed invention.

Like Dye et al., these references merely teach a thiogallate blue phosphor. Indeed at col. 2, lines 37-40 Moss, III teaches thiogallate material is expensive. If one skilled in the art understood that compounds as in the claimed invention, without gallium, could be used as a blue emitting substance, why then did one skilled art, such as Moss, III, not teach just such an alternative?

In view of the foregoing claims 6-9, 11-14, 16-21 and 23-27, all the pending claims, are patentable over the cited art.

Prompt and favorable action is respectfully requested.

Respectfully submitted,

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Marta Delsignore (Reg. No. 32,689)
GOODWIN PROCTER LLP
599 Lexington Avenue
New York, NY 10022
(212) 813-8822